

Notice of Allowability

Application No.

09/828,600

Applicant(s)

UHT ET AL.

Examiner

Richard Ellis

Art Unit

2183

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to RCE and amendment filed May 11, 2005.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ The drawings filed on 11 May 2005 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 20050511
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


RICHARD L. ELLIS
PRIMARY EXAMINER

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1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. In the claims, please cancel claims 17-33, drawn to an invention which has been non-elected by original presentation.
3. Pursuant to MPEP 606.01, the title has been changed to read: --CPU/memory device having processing units distributed throughout memory with positional time-tag associated with instructions to indicate execution order.
4. Newly submitted claims 17-33 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Original claims 1-16 relate to an invention wherein a scalable processor system contains memory devices, processing elements, and active stations, and wherein the memory devices contain instructions which are propagated through the memory device, each instruction associated with a current timetag, and wherein the timetag is utilized to enforce programmatic ordering of the instructions by the active stations.
 - a. New claims 17-19 relate to a an invention for a method of execution of a loop instruction.
 - b. New claims 20-30 relate to an invention for concurrently executing instructions with respect to data or control dependencies, broadcasting of execution results, and selective reexecution of particular instructions as a result of the broadcasting.
 - c. New claims 31-33 relate to a method for speculatively executing both paths of a branch instruction simultaneously.

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5. Inventions a-c are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, inventions a-c have separate utility such as use for accelerating a conventional computer by allowing for faster loop operation, faster superscalar scheduling and execution, or eliminating a pipeline break due to a branch instruction without requiring any of the details of the timetag driven execution ordering system of the previously examined invention. See MPEP § 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 17-33 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

6. This application is in condition for allowance except for the presence of claims 17-33 to a separate invention non-elected by original presentation. Accordingly, claims 17-33 been cancelled.

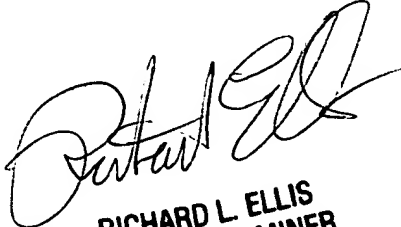
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Ellis whose telephone number is 571-272-4165. The examiner can normally be reached on Monday-Thursday from 0800 to 1830.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan, can be reached on 571-272-4162. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RICHARD L. ELLIS
PRIMARY EXAMINER